Amendment Under 37 C.F.R. § 1.116 Dated 12/29/04

## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## Listing of Claims:

1-31 (canceled)

- 32. (Amended) A method for inhibiting the expression of a target gene in a substrate that expresses the targeted gene, comprising the steps of:
- a) providing a composition comprising an mRNA-cDNA hybrid prior to contacting said substrate, wherein the mRNA-cDNA hybrid is capable of inhibiting the expression of said targeted gene in said substrate; and
- b) contacting said substrate with said composition under conditions such that the expression of said gene in said substrate is inhibited.
  - 33. (canceled)
- 34. (Original) The method of Claim 32, wherein said substrate expresses said targeted gene in vivo.
- 35. (Original) The method of Claim 32, wherein said targeted gene comprises a gene selected from the group consisting of pathogenic nucleic acids, viral genes, mutated genes, and oncogenes.
- 36. (Original) The method of Claim 32, wherein said mRNA-cDNA hybrid inhibits 6-catenin expression.
- 37. (Withdrawn) The method of Claim 32, wherein said mRNA-cDNA hybrid inhibits bcl-2 expression.
- 38. (Original) The method of Claim 32, wherein said substrate is a prokaryote.
  - 39. (Original) The method of Claim 38, wherein said prokaryote is a virus.
- 40. (Original) The method of Claim 38, wherein said prokaryote is a bacterial cell.

Amendment Under 37 C.F.R. § 1.116 Dated 12/29/04

- 41. (Original) The method of Claim 32, wherein said substrate is a eukaryote or the cell of said eukaryote.
- 42. (Original) The method of Claim 41, wherein said eukaryote is a vertebrate.
- 43. (Original) The method of Claim 41, wherein said eukaryote is a mouse.
- 44. (Original) The method of Claim 41, wherein said eukaryote is chimpanzee.
- 45. (Original) The method of Claim 41, wherein said eukaryote is a human being.

46-54 (canceled)

- 55. (New) The method of Claim 32, wherein the composition consists of an mRNA-cDNA hybrid capable of inhibiting the expression of said targeted gene.
- 56. (New) A method for inhibiting the expression of a target gene in a substrate that expresses the targeted gene, comprising the steps of:
- a) providing a composition comprising a synthetic mRNA-cDNA hybrid capable of inhibiting the expression of said targeted gene in said substrate; and
- b) contacting said substrate with said composition under conditions such that the expression of said gene in said substrate is inhibited.
- 57. (New) The method of Claim 56, wherein the composition consists of an mRNA-cDNA hybrid capable of inhibiting the expression of said targeted gene.
- 58. (New) The method of Claim 56, wherein said substrate expresses said targeted gene in vivo.
- 59. (New) The method of Claim 56, wherein said targeted gene comprises a gene selected from the group consisting of pathogenic nucleic acids, viral genes, mutated genes, and oncogenes.
- 60. (New) The method of Claim 56, wherein said mRNA-cDNA hybrid inhibits 8-catenin expression.

Application Serial No. 09/920,342

Customer No.: 26021

Amendment Under 37 C.F.R. § 1.116 Dated 12/29/04

- 61. (New) The method of Claim 56, wherein said substrate is a prokaryote.
  - 62. (New) The method of Claim 61, wherein said prokaryote is a virus.
- 63. (New) The method of Claim 61, wherein said prokaryote is a bacterial cell.
- 64. (New) The method of Claim 56, wherein said substrate is a eukaryote or the cell of said eukaryote.
- 65. (New) The method of Claim 64, wherein said eukaryote is a vertebrate.
  - 66. (New) The method of Claim 64, wherein said eukaryote is a mouse.
  - 67. (New) The method of Claim 64, wherein said eukaryote is chimpanzee.
- 68. (New) The method of Claim 64, wherein said eukaryote is a human being.